

Fibre-optics for use in metal-enhanced fluorescence sensing

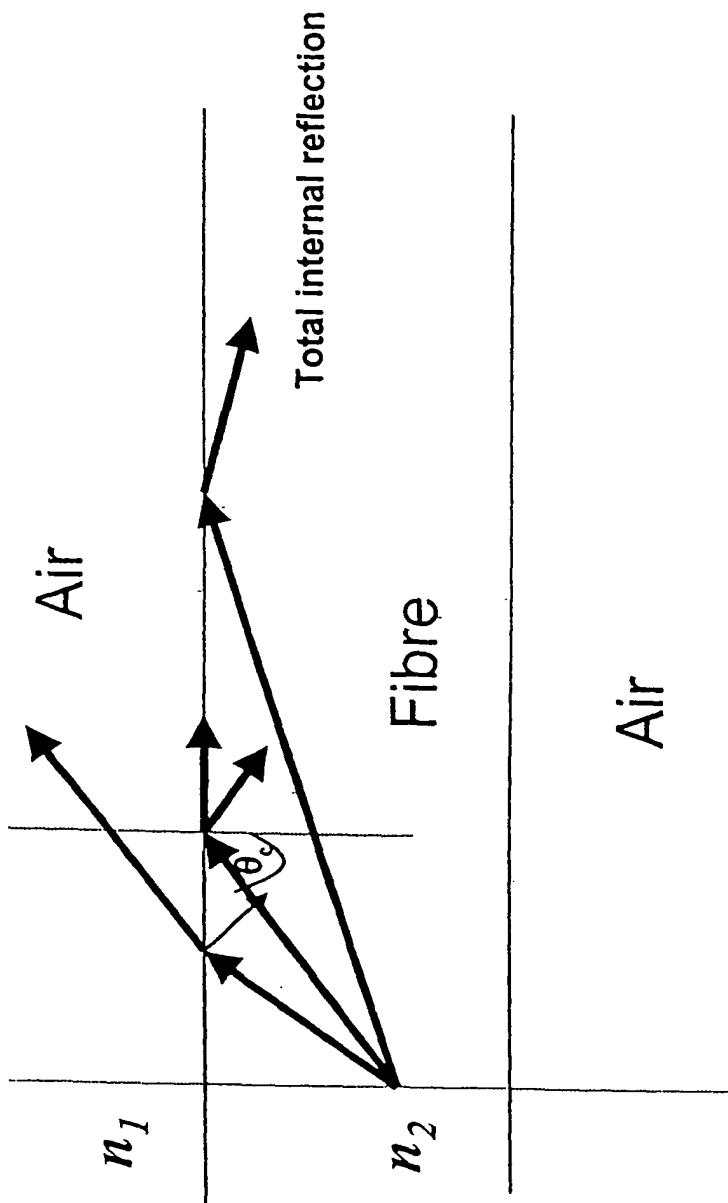


Fig. 1.

Fibre-optics for use in metal-enhanced fluorescence sensing

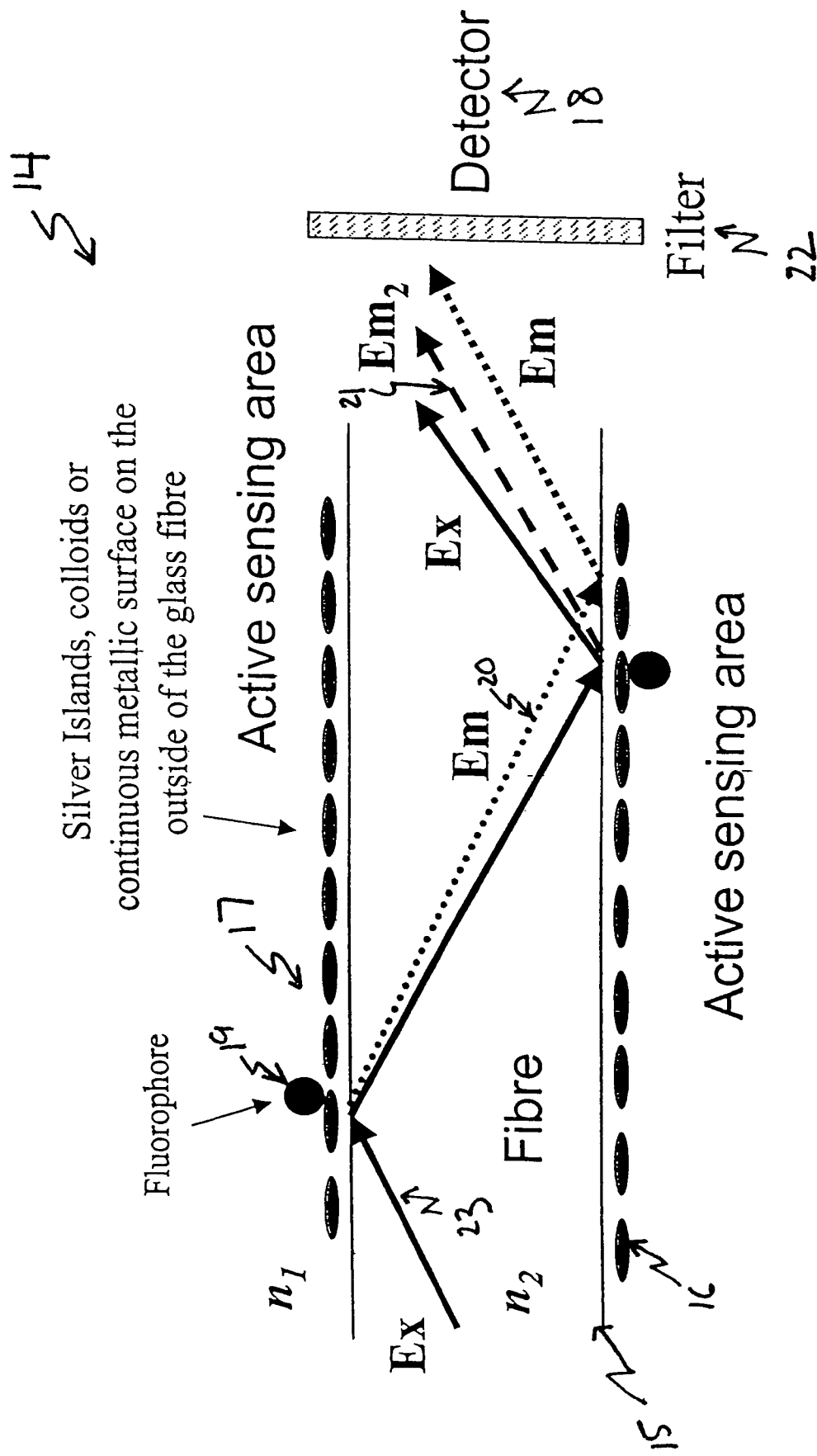


Fig.2.

Fibre-optics for use in metal-enhanced fluorescence sensing

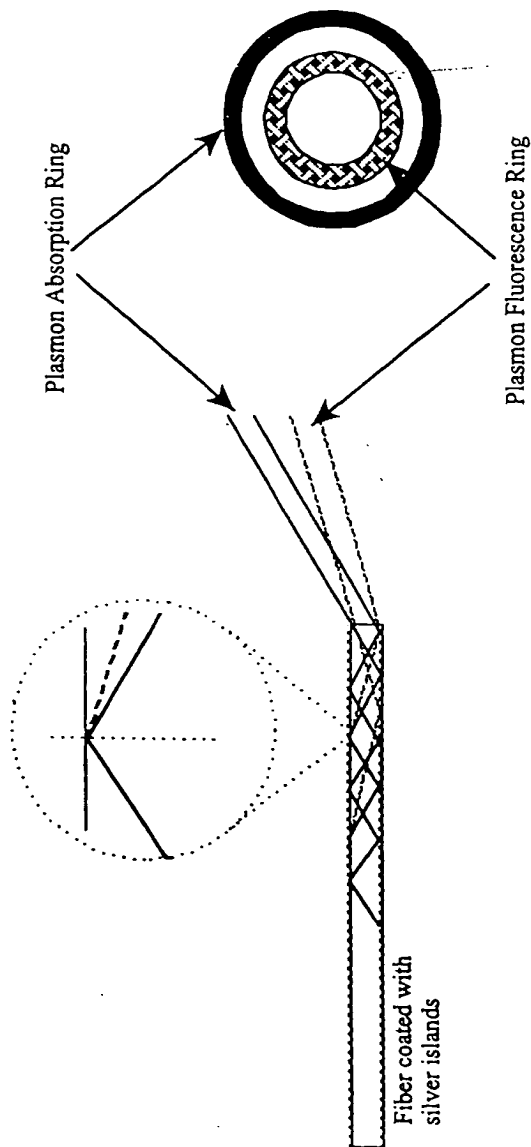
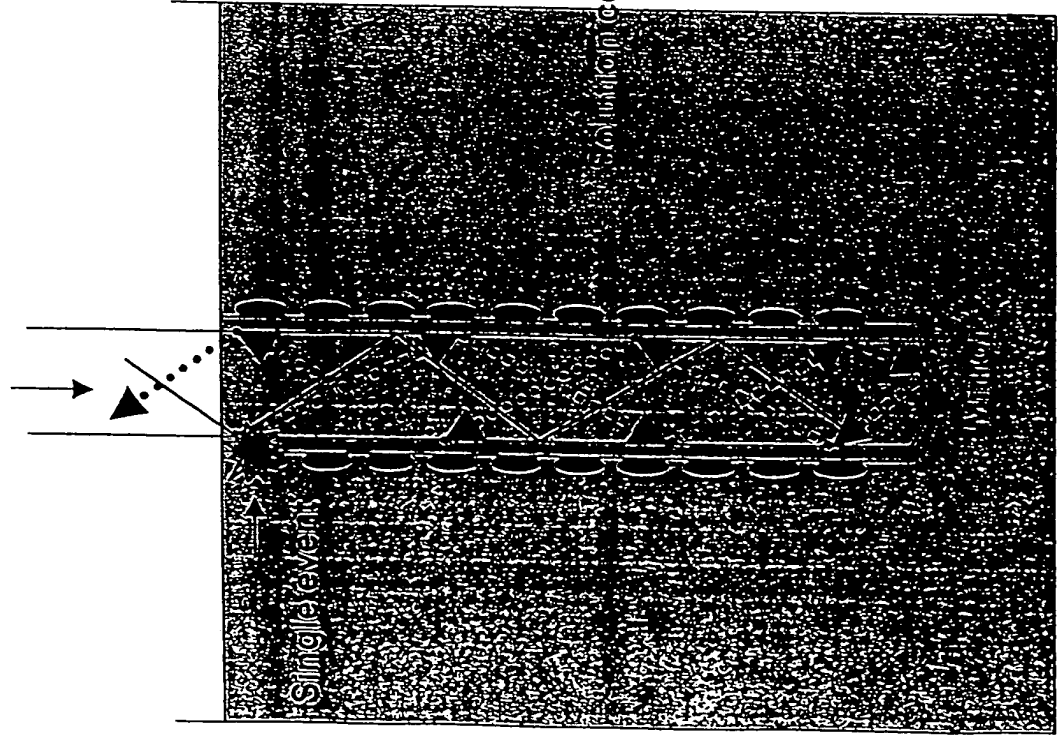


Fig. 3.

Fibre-optics for use in metal-enhanced fluorescence sensing

Ex source and Em detector



- Large active surface area of fibre
- Very little losses via TIR. In comparison a mirror only reflects 95 % of the light at best.

Fig. 4.

Fibre-optics for use in metal-enhanced fluorescence sensing

Application

Fluorescence Immunoassays with Non-Fluorescent or fluorescent Chromophores on the surface of the fibre

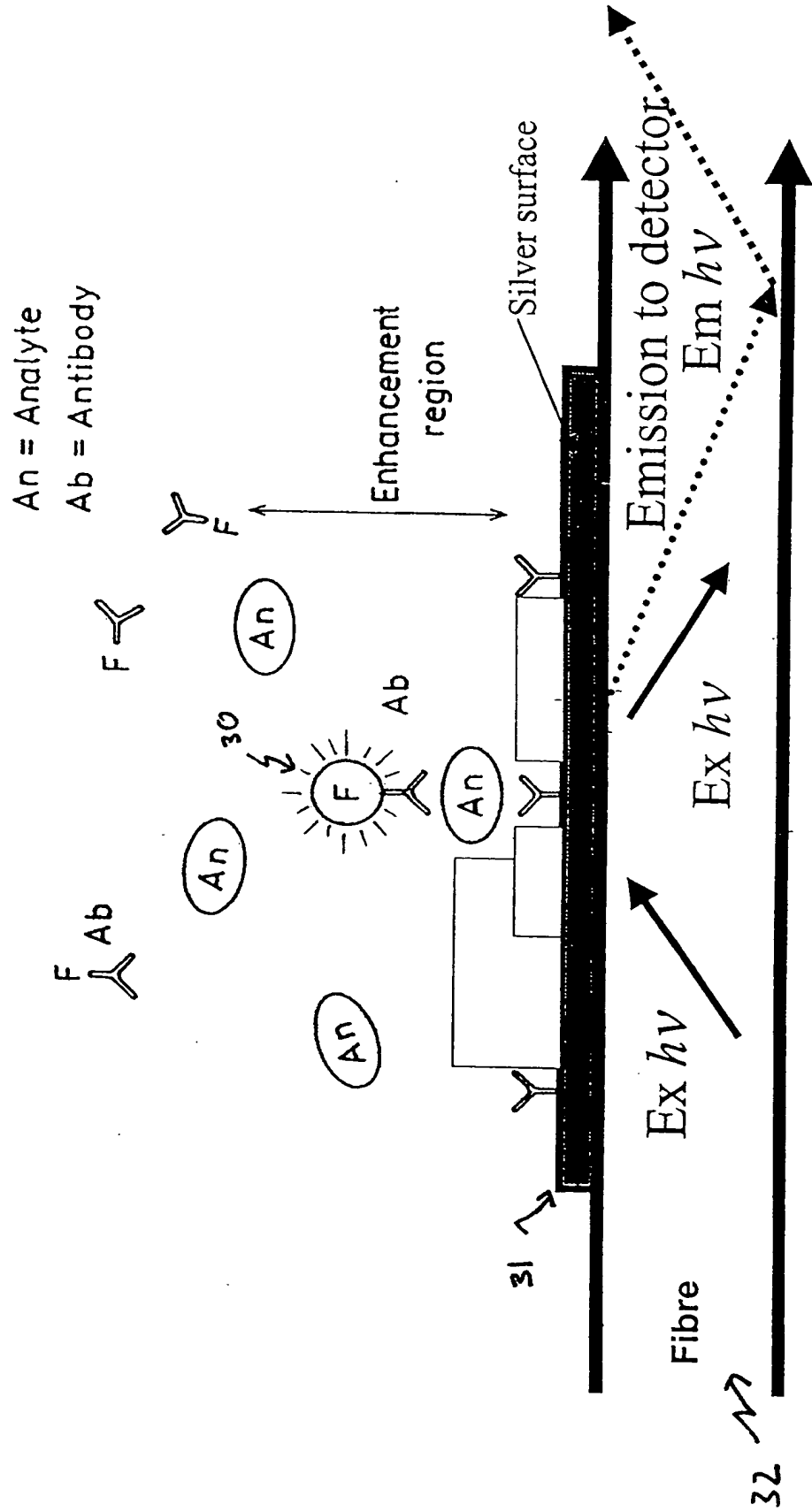


Fig. 5.

Optical structures for metal enhanced fluorescence sensing

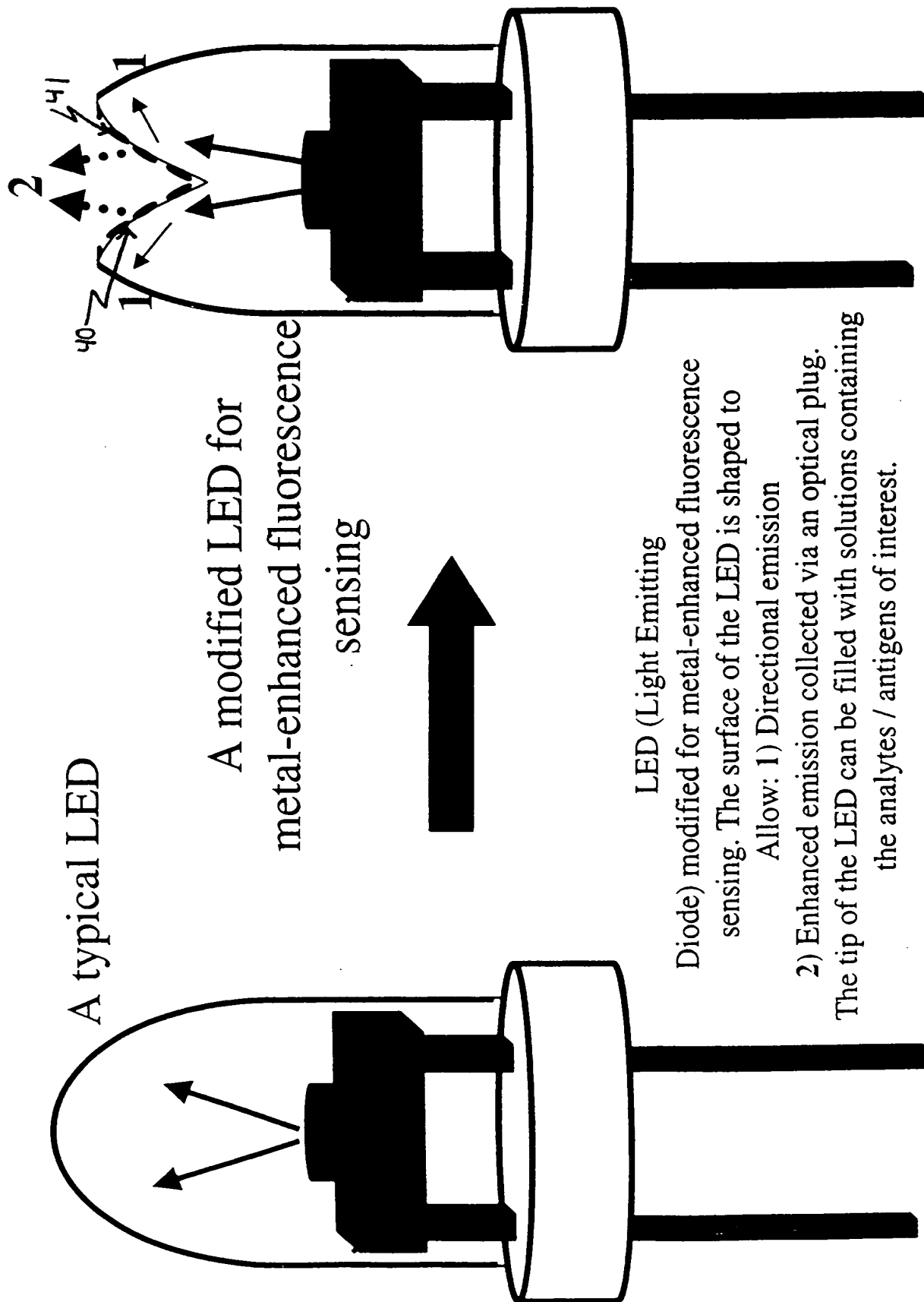


Fig. 1-6

Optical structures for metal enhanced fluorescence sensing

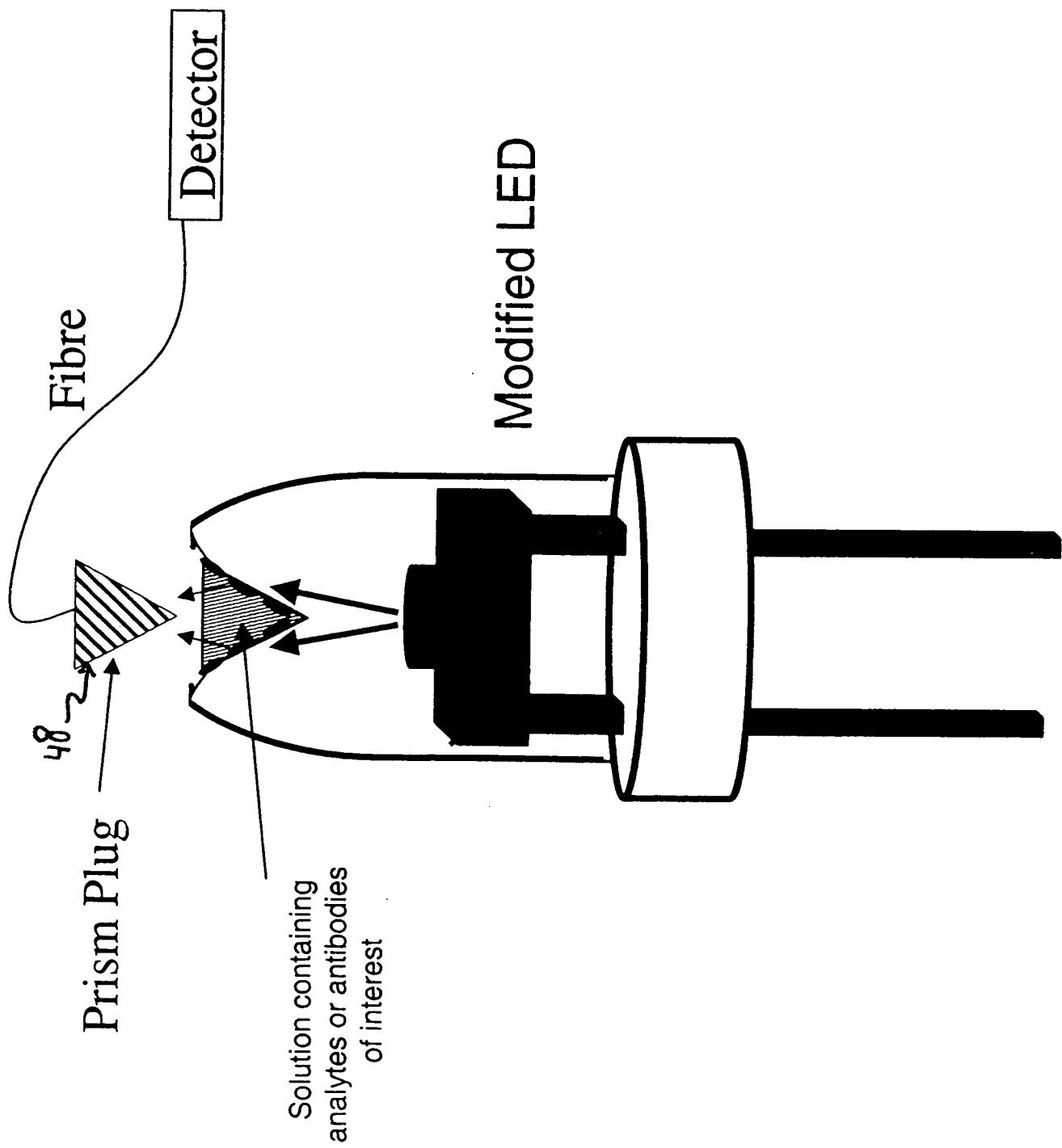
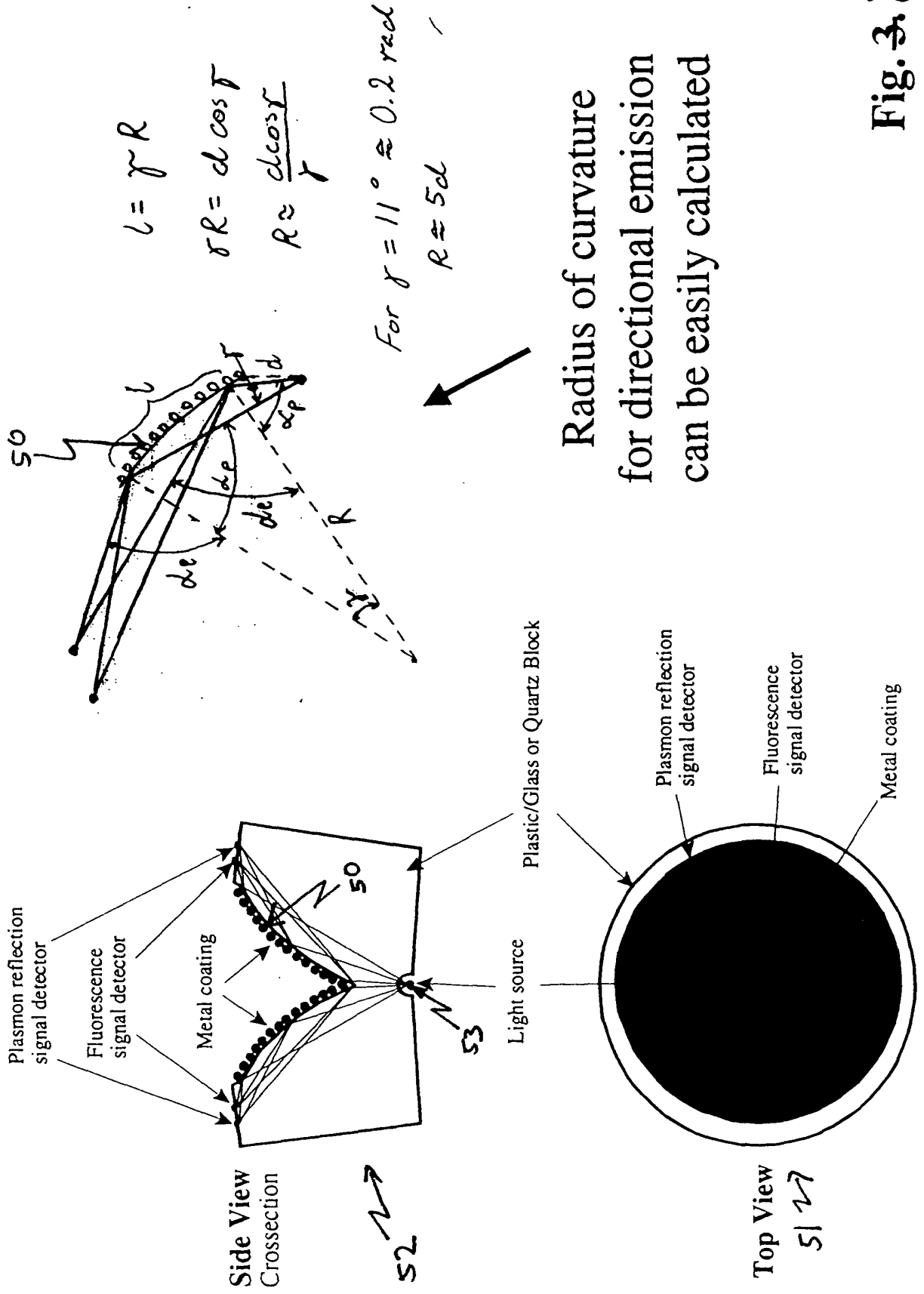


Fig. 2: 7

Modified LED surface or disposable cartridge that goes over the top of a light source or even ambient light



Optical structures for metal enhanced fluorescence sensing

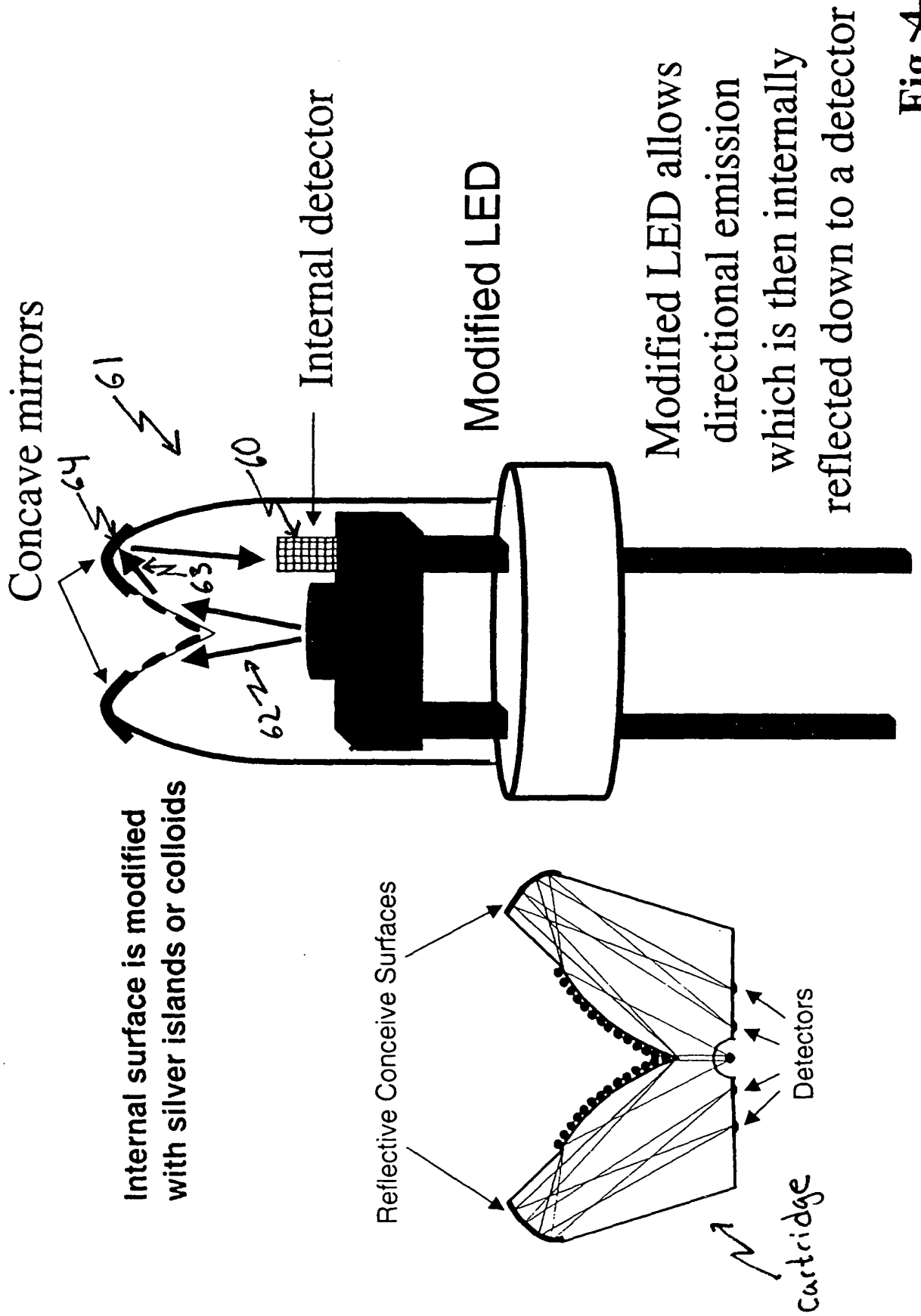


Fig. 4.9

Applications Fluorescence Immunoassays with Non-Fluorescent or fluorescent Chromophores on the surface of the LED

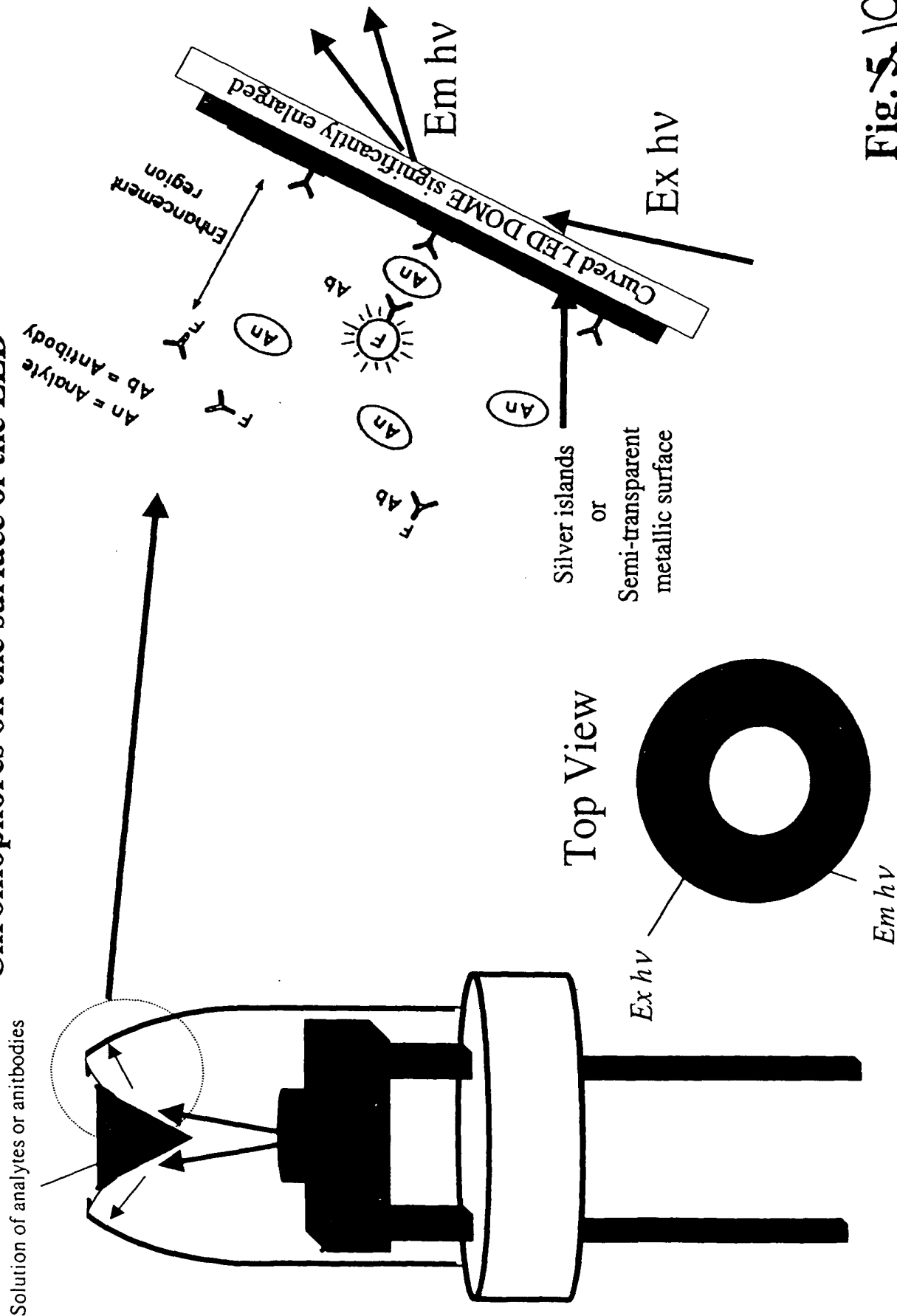


Fig. 5/10

Applications

Resonance Energy Transfer Immunoassays on the surface of the modified LED

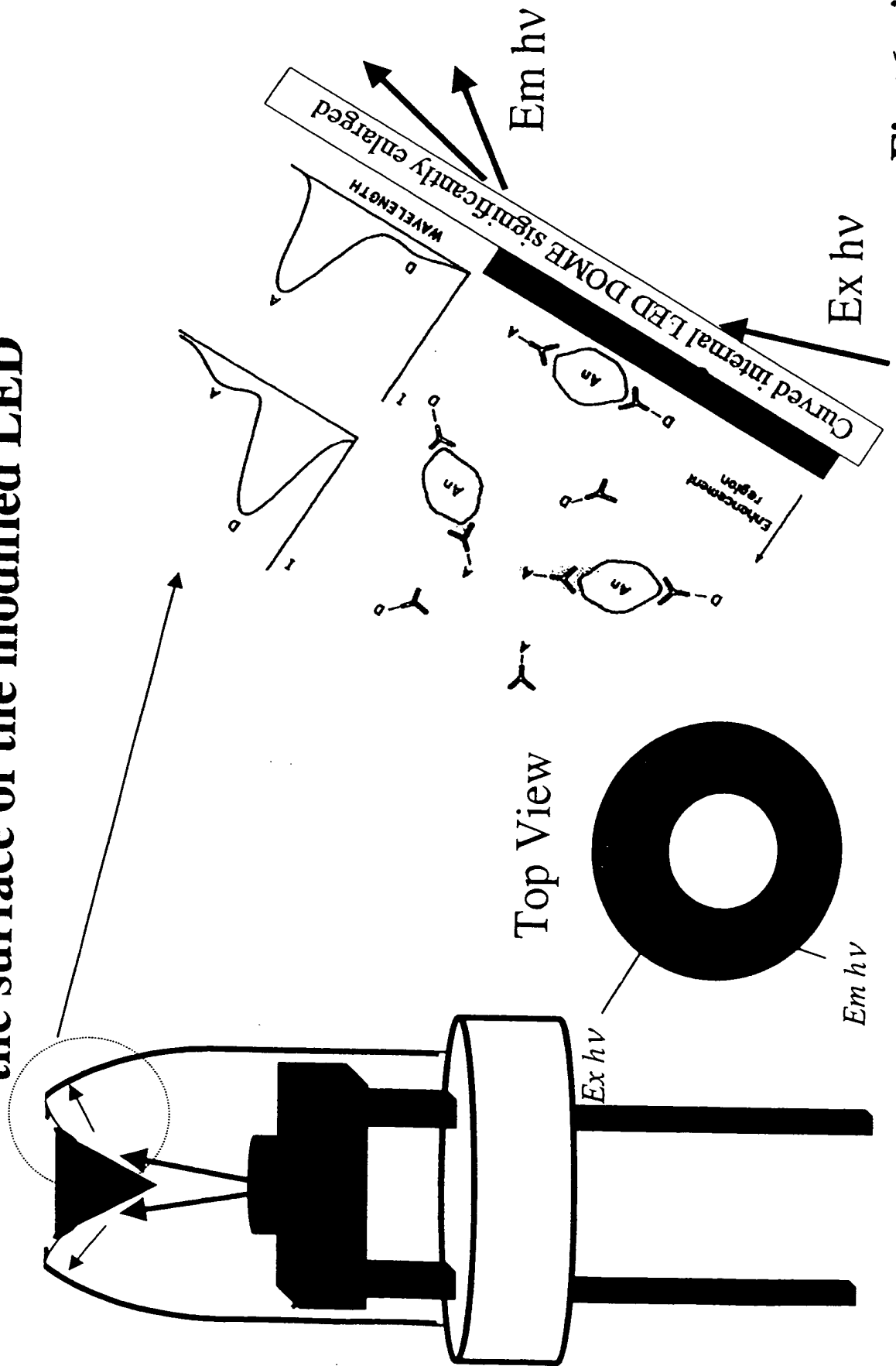


Fig. 6

Applications Size inclusion/exclusion sensing on the surface of the LED

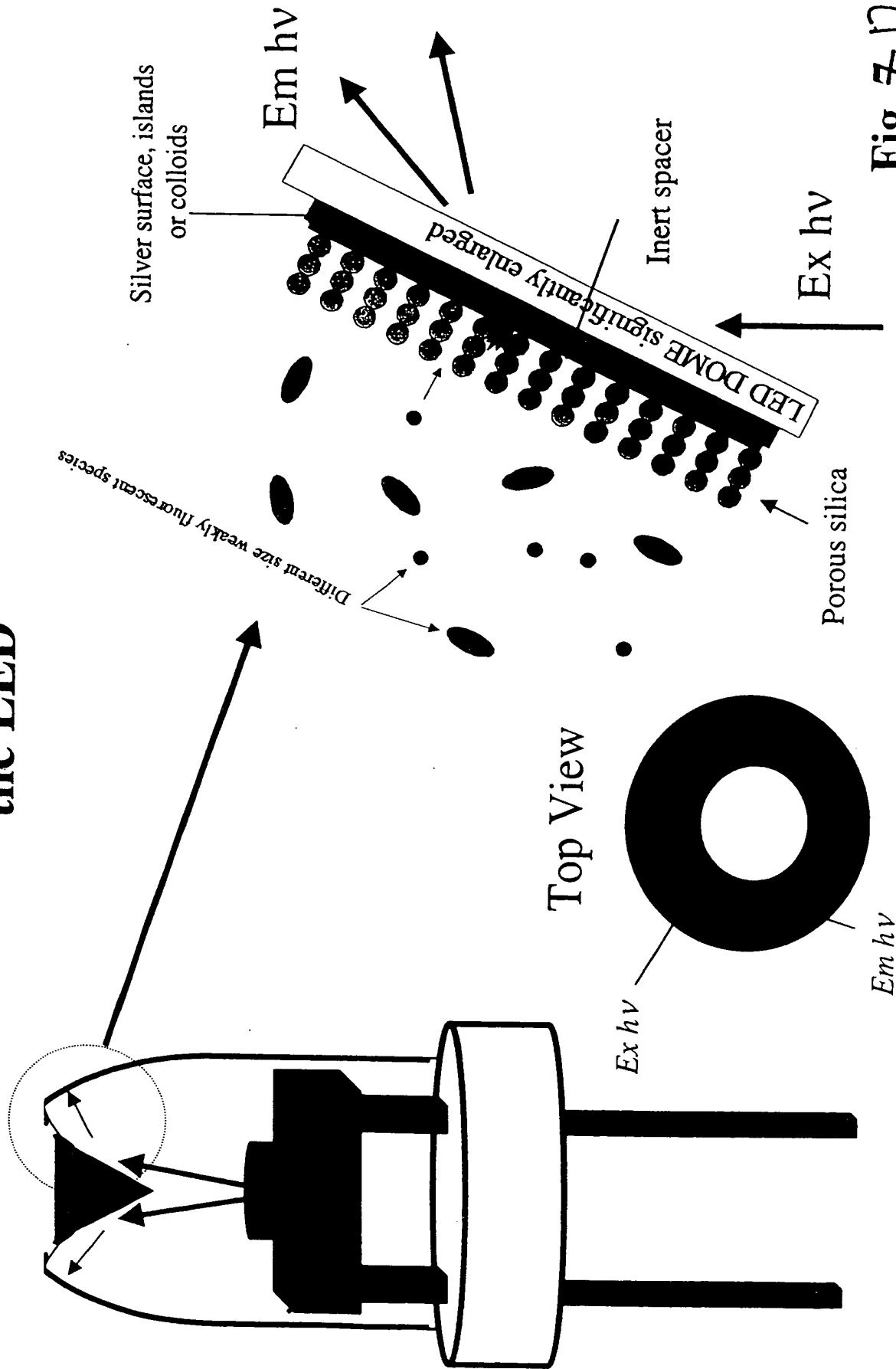


Fig. 7.12